

1158-20-28

Cris Negron* (cnegron@email.unc.edu). *Cohomology for Drinfeld doubles of arbitrary finite group schemes*. Preliminary report.

I will discuss recent work concerning cohomology for Drinfeld doubles of finite group scheme. (The category of representations for the Drinfeld double of a given group scheme G is identified with the category of G -equivariant sheaves on G , under the adjoint action.) We show that the algebra of self-extensions of the unit, i.e. the trivial representation for the double, forms a finitely generated algebra, and that for any representation V of the double, extensions from the unit to V form a finitely generated module over this algebra. The project completes earlier work of E. M. Friedlander and the speaker, in which the given results were established for doubles of Frobenius kernels in smooth algebraic groups. (Received February 08, 2020)